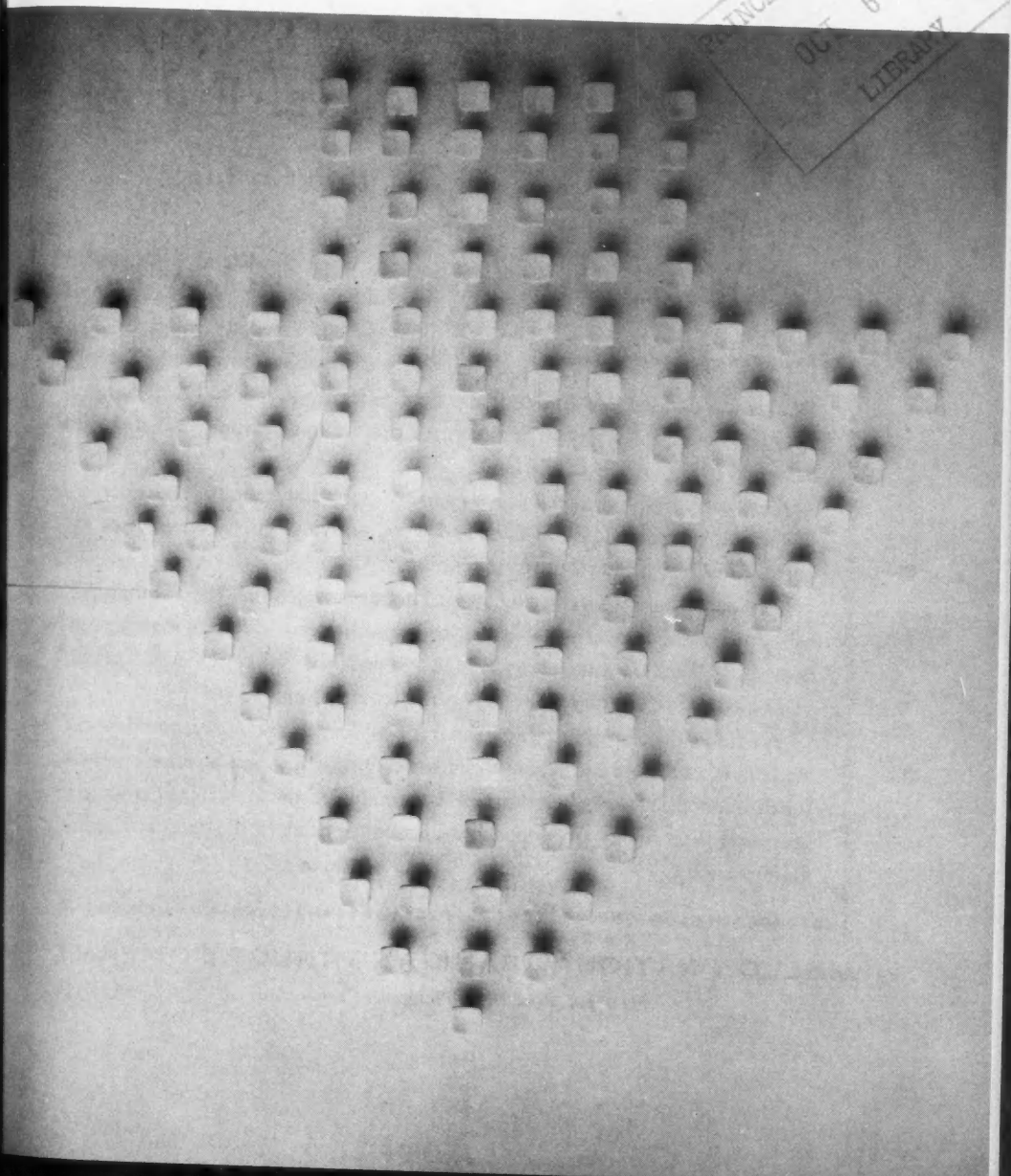


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Carnegie Magazine October 1961

PRINCETON UNIVERSITY
OCT 6 1961
LIBRARY





Shown here is a suit of armor copied from one worn by Ferdinand I of Bohemia, during the holy wars of the 16th Century. On exhibit at Carnegie Museum.

The Economy of Medieval Europe

16th Century

IN 1526, when Ferdinand I succeeded his childless brother-in-law as king of Bohemia and Hungary, most of civilized Europe was organized as a feudal society.

Wealth was divided into land holdings held generally by a lord or other ruler, who was bound in loyalty to the king. All people, animals and material wealth belonged to the owner of the land.

However, within this feudal society many crafts and trades were practiced—including the manufacture of linen and wool, weaving, shipbuilding, glass and pottery making, fishing and sugar refining.

Although there was little exchange of goods between the “serfs” other than by barter, trade between the feudal lords and between different duchies was flourishing. For such commerce, the gold “gulden” and silver “guldengroeschen” were used, as well as bills of exchange and letters of credit.

As trade developed between the various feudal duchies, a standardized medium of exchange and standardized banking practices had become essential; for throughout history, such practices have followed the growth of commerce, becoming more highly developed as the economic needs of the country became more complex.

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Tuesdays 10:00 A.M. to 10:00 P.M., beginning October 31

INTERNATIONAL EXHIBITION weekdays to 10:00 P.M.

Sundays 2:00 to 5:00 P.M.

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CAFETERIA OPEN FOR VISITORS TO THE BUILDING

Luncheon 11:00 A.M. to 2:00 P.M., weekdays

Snacks 2:00 to 4:00 P.M., weekdays

Dinner 4:00 to 7:00 P.M., October 19, 31

COVER

Cast in aluminum and painted white, *Arrow No. 1* by the Greek artist Chryssa will hang in the 1961 PITTSBURGH INTERNATIONAL on loan from the Betty Parsons Gallery.

Chryssa was born in Athens in 1933 and became an American citizen in 1955. She studied in Paris and San Francisco before settling down in New York. Her success in recent and notable, as her art has been purchased by a number of museums and collections including the Whitney and The Museum of Modern Art.

CARNEGIE MAGAZINE dedicated to literature, science, art, and music, is published monthly (except July and August) at 4400 Forbes Avenue, Pittsburgh 13, Pennsylvania, in behalf of Carnegie Institute and Carnegie Library of Pittsburgh. James M. Bovard, editor; Jeanette F. Seneff, associate editor; Dorothy E. Teckmeyer, assistant editor; Melva Z. Bodell, advertising manager. Telephone MAYflower 1-7300. Volume XXXV, Number 8, October 1961. Permission to reprint articles will be granted on request. Copies regularly sent to members of Carnegie Institute Society. Subscriptions outside Allegheny County \$2.00 a year.

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OCTOBER CALENDAR

FOUNDER-PATRONS DAY

The sixty-fifth annual celebration of Founder-Patrons Day is the evening of October 26, when members of Carnegie Institute Society will be invited for preview of the 1961 PITTSBURGH INTERNATIONAL EXHIBITION in the second- and third-floor galleries of the Department of Fine Arts.

Refreshments will be served in Sculpture Court, and an instrumental ensemble will provide music.

1961 PITTSBURGH INTERNATIONAL

The 1961 PITTSBURGH INTERNATIONAL EXHIBITION OF CONTEMPORARY PAINTING AND SCULPTURE, opening October 27, comprises 330 paintings and 116 sculptures by artists from 30 countries.

Seven one-man shows are included in the exhibition: Pierre Alechinsky, Reg Butler, Alan Davie, Richard Diebenkorn, Grace Hartigan, Carl-Henning Pedersen, and David Smith (page 261).

The INTERNATIONAL EXHIBITION will continue through January 7. It will be open weekdays 10:00 A.M. to 10:00 P.M.; Sundays 2:00 to 5:00 P.M.

The 1961 PITTSBURGH INTERNATIONAL has been organized by Gordon Bailey Washburn, director of fine arts, and is sponsored by The A. W. Mellon Educational and Charitable Trust.

ROUND TABLE ON CONTEMPORARY ART

The five distinguished members of the jury of award for the 1961 PITTSBURGH INTERNATIONAL will join Gordon Bailey Washburn in a round-table discussion October 10 (see opposite page).

LECTURES ON THE INTERNATIONAL

Gordon Bailey Washburn will give three illustrated lectures on the 1961 PITTSBURGH INTERNATIONAL EXHIBITION (announcement on page 263).

WATERCOLORS AND DRAWINGS

An extensive display of 130 watercolors and drawings from the Institute collection will open October 26 on the balcony of Sculpture Court. These range from Renaissance to contemporary artists and include Oriental work and early American drawings. Arranged by Leon Arkus, curator, section of prints and drawings.

DECORATIVE ARTS

A representative selection of *objets d'art* from the various collections of Carnegie Institute is now installed in Sculpture Court, this extensive showing made possible by Sarah Mellon Scaife Foundation.

CARNEGIE INSTITUTE SOCIETY LECTURES

Mondays, Mt. Lebanon Auditorium, 6:30, 8:30 P.M.
Tuesdays, Carnegie Music Hall, 2:30, 6:30, 8:30 P.M.
Admission by membership card

October 30, 31—PANAMA AND THE CANAL ZONE

William G. Campbell reports on interesting Panama, its native festivals and *norteamericanos*.

November 6, 7—ON THE ROAD TO MANDALAY

Curtis Nagel features the Malay Peninsula: Singapore, Thailand, Bangkok, Rangoon, and Burma.

FOSSIL FISH

A rare and nearly perfect specimen of a Paleozoic Palaeoniscoid, ancestor of most of today's bony fish, recently given the Museum by Edith Allen, of New Castle, is on display near Art and Nature Shop. Dating back 300 million years, it was found in northeastern Ohio. Exhibit by Clifford Morrow.

NUTS

Autumn focuses attention on an exhibit of nuts in Botany Hall: hickory, Brazil, coffee-tree, ivory, leeches, Philippine, piñon, and pistachio nuts; chestnut, coconut, English walnut, peanut, butter-nut, St. John's bread, black walnut, pecan, almond, sugar pine cone and nut, hazelnut, European chestnut, and cacao bean.

WHITE BLACK BEAR

Kermode's Bear, a rare all-white sport of the black bear from British Columbia, joins other specimens in Mammal Hall recently given handsome new settings by the Ottmar F. von Fuehrers.

LIFE IN THE LIBRARY

Ink and pastel sketches of daily scenes in Carnegie Library of Pittsburgh are on display this month in the Library first-floor corridor. They are by Margarita Ziff March, of Mexico City.

STORY HOUR

Preschool story hour will resume on alternate Tuesday mornings at 10:30 o'clock October 17 in the Boys and Girls Division of Carnegie Library.

Story hour for five- to twelve-year-olds continues regularly at the Library each Saturday at 2:15 P.M.

SUNDAY ORGAN RECITALS

Marshall Bidwell presents a recital on the great organ of Music Hall each Sunday from 3:00 to 4:00 P.M. Arbuckle-Jamison Foundation sponsorship. Broadcast by WLOA AM and FM.

THE 1961 INTERNATIONAL JURY OF AWARD

GORDON BAILEY WASHBURN

THE judging of the 1961 PITTSBURGH INTERNATIONAL will take place during the four days, October 9-12. More than twelve thousand dollars will be awarded by a jury consisting of an artist, a collector, a critic, an organizer of exhibitions, and a museum official. The following gentlemen have consented to act as the 1961 jury of award.

KENZO OKADA

Inasmuch as we are including an unusually large number of Japanese works in the 1961 PITTSBURGH INTERNATIONAL, it seems appropriate that a distinguished Japanese artist should have been invited to serve on the jury of award. Kenzo Okada is renowned as one of the foremost artists of his country. He eminently represents the new entente between the arts of the East and those of the West, since his images and style reflect ancient Oriental traditions, while his format and techniques are adaptations from the West. In his work two hemispheres unite, resulting in an art that represents the very nature of our time, since it is the fruit of "one world."

Kenzo Okada was born in Yokohama in 1902. Following his schooling, which included one and a half years at Tokyo Fine Arts University, the artist studied in Paris for three years, exhibiting at the Salon d'Automne. Returning to Japan, he became known to his countrymen through a series of one-man shows at the Nichido Gallery in Tokyo from 1929 through 1935. Most Japanese artists are associated with a group. Okada has been a member of Nikakai, the largest association of contemporary artists in Japan. A constant recipient of prizes, starting with the Nikakai group in 1936,

Round-Table Discussion

CONTEMPORARY ART

TUESDAY, OCTOBER 10, 8:30 P.M.

CARNEGIE LECTURE HALL

1961 JURY OF AWARD

LAWRENCE ALLOWAY

ROBERT GIRON

SEYMOUR H. KNOX

KENZO OKADA

DANIEL CATTON RICH

Gordon Bailey Washburn presiding

TICKETS \$2.00, STUDENTS HALF PRICE
AUSPICES OF THE JUNIOR COUNCIL
DEPARTMENT OF FINE ARTS

Okada has been honored by various institutions including the Chicago Art Institute, the American Academy of Arts and Letters, the PITTSBURGH INTERNATIONAL (1955 and 1958), the Venice *Biennale*, UNESCO, and the Ford Foundation.

After some years of teaching in Japan, Okada came to the United States in 1950, since which time his paintings have been acquired by numerous collectors and by more than twenty American museums. Now an American citizen, he lives in New York, where he shows his work at the Betty Parsons Gallery.

The formality of his art is quickly noticeable to all observers, imparting to it what we call in the West a "classical" character. Although the forms are dreamy and vague, they take their appointed places in a strict construction. Thus their poetic sweetness is countered by his severe sense of their placement. In the end, everything in his imagery

seems to float in perfect equilibrium. The delight he offers through the suspension of his forms, together with his strong structural sense, introduces us to qualities many thousands of years old in the arts of the East.

SEYMOUR H. KNOX

Mr. Knox is well known as one of America's most active collectors of contemporary art. Not everyone is aware, however, that he is nearly unique in his mode of collecting, since it is not for himself that he collects, but for a museum. In these days of speculation in art, such detachment and modesty of spirit are distinctly unusual.

The fortunate recipient of Mr. Knox's generosity is the Albright Art Gallery of the Buffalo Fine Arts Academy, of which he is president, and which has become one of the few museums in the world where visitors may see a representative collection of the best in contemporary art. During the past fifteen years, Mr. Knox alone has contributed nearly two hundred paintings and sculptures. Moreover, he has recently given a million dollars toward the building of a new wing that will soon house this rapidly expanding collection. In recognition of Mr. Knox's leadership, which has led to many other donations to the same cause, as well as of his own superb generosity, the trustees of the Buffalo Fine Arts Academy have changed the name of the museum to the Albright-Knox Art Gallery.

Seymour Knox's interest in contemporary art dates back to the thirties, when the writer was director of Albright Art Gallery. At that time Mr. Knox paved the way for the Gallery's entry into the field of modern art by the donation, with members of his family, of \$100,000 for establishment of a Room of Contemporary Art. This experimental scheme, allowing contemporary works of art to be incorporated into the per-



KENZO OKADA

manent collection only as they pass the test of time—a procedure adopted at Carnegie Institute in 1953—has expanded into the present and far greater activity.

Mr. Knox is director of seven corporations and chairman of the board of the Marine Midland Trust Company of Western New York. He is also chairman of the council of The University of Buffalo, a trustee of Yale, and member of Yale University council. Recently Governor Nelson Rockefeller appointed him chairman of the New York State Council on Arts. His interest in the arts is equaled by his interest in the world of sports, and he is a former seven-goal polo player.

LAWRENCE ALLOWAY

The number of excellent critics who can write fluently and vividly about contemporary art is exceedingly small. Several of the most distinguished are British, and among these Lawrence Alloway is regarded as outstanding. Readers of art journals in every country are already familiar with his articles, inasmuch as he contributes to magazines in this country and in Europe, as well as to those that have an international circulation.

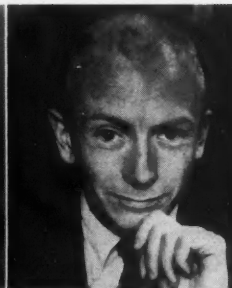
Lawrence Alloway was born in Wimbledon, London, in 1926. At nineteen he was awarded a bursary, as it is called, or scholarship, from Hodder and Stoughton by the Society of Authors. When this had run four



DANIEL CATTION RICH



SEYMOUR KNOX



LAWRENCE ALLOWAY



ROBERT GIRON

years, he became an assistant lecturer at the National Gallery in London. From 1949 to 1957 he was lecturer for both Cambridge and Oxford Universities, for London University, and for the Arts Council of Great Britain. Later he was appointed lecturer at the Tate Gallery in London.

Turning to writing at the same time, Mr. Alloway became editor of *Athene*, and published a book in 1954 entitled *Nine Abstract Artists* (Tiranti, London). Later he became a regular contributor to *Art International*, the well-known periodical published by James Fitzsimmons in Zurich, having already been serving for several years as British correspondent for *Art News* of New York. He was also associated at this time with the Institute of Contemporary Arts in London, of which he later became program director. Today Mr. Alloway is active as art critic for the *London Weekly Post* and is working on a study of *American Abstract Painting* to be published by Faber and Faber, a history of the Betty Parsons Gallery, and a monograph on Asger Jorn, the Danish painter. During the coming winter he will be in residence at Bennington College in Vermont as guest instructor in art.

Lawrence Alloway brilliantly represents the younger generation of European critics who champion American painting and draw the world's attention to other such crests of

the foaming "wave of the future." He has done more than any other foreign critic to introduce American art to Europe and to distinguish for his readers the quality and nature of the *avant garde* in contemporary art. In addition to his sensibility, he is endowed with verbal felicity and has coined or popularized various phrases that are already entering the language of criticism, such as "hard-edge abstraction" and "junk culture." Both his analytical intelligence and his sensitivity, his precision of thought and his indomitable enthusiasm reveal him as a critic who will long continue to be heard.

ROBERT GIRON

Robert Giron directs the activities of the Palais des Beaux-Arts in Brussels. This is one of the most famous exhibition centers of Europe where all the arts, including music, ballet, and the theater, are offered. Mr. Giron is responsible for the exhibitions that follow one another in great profusion, providing the citizens of Brussels with a review of all the best talents and the newest trends in contemporary art. Not all the exhibitions are modern, however, as one may remember from the magnificent show on HUMANIST EUROPE in 1955 organized under auspices of the Council of Europe. The program of the Palais des Beaux-Arts is a costly one, and it is a matter of interest to know

that it is supported by an auction house within the confines of the building. This would be comparable to The Museum of Modern Art's possessing and running Parke-Bernet Galleries in New York to pay for its activities.

Born in Brussels in 1897, Robert Giron first entered the art world as a painter. Later he turned to his present work as an organizer of exhibitions. In 1958, Robert Giron gathered together what is generally regarded as the finest review of twentieth-century art that has yet been shown. This was the great exhibition entitled FIFTY YEARS OF MODERN ART, shown at the Brussels World's Fair. Mr. Giron travels a great deal and only last year was in the United States arranging exhibitions for Brussels.

DANIEL CATTON RICH

Those who have been concerned with the development of our American museums are well acquainted with the distinguished record of Daniel Catton Rich. Born in South Bend, Indiana, Mr. Rich received a Ph.D. degree from the University of Chicago and later attended Harvard University. He has been director of the Worcester Art Museum since 1958. For many years previously, Mr. Rich was associated with the Art Institute of Chicago, where he became director of fine arts in 1938 and in 1945 its chief director, occupying that post until his resignation three years ago.

Like most people who are deeply interested in contemporary art, Daniel Catton Rich is a learned and perceptive scholar of the old masters and ancient arts. In addition to being a frequent contributor to art journals, he is the author of *Seurat and the Evolution of "La Grande Jatte," Henri Rousseau, Georgia O'Keefe, and Degas*.

He is a member of the Association of Art Museum Directors, La Société des Rosettes

et Rubans de France, the International Council of Museums, the American Society of Aesthetics, an honorary member of the American Institute of Architects, and is a trustee of the Solomon R. Guggenheim Museum in New York City.

Mr. Rich was selection chairman of the exhibition of CONTEMPORARY AMERICAN ART at the New York World's Fair in 1939, was awards chairman for the CONTEMPORARY PAINTING EXHIBITION at the Golden Gate International Exposition, a member of the selection committee for the AMERICAN PAINTING EXHIBITION at the Tate Gallery in 1946. Ten years later he was commissioner from the United States to the Venice Biennale. Last year he was a visiting lecturer at Harvard University. He is a trustee of the American Academy in Rome. As may be remembered, Mr. Rich spoke at Carnegie Institute on the BICENTENNIAL INTERNATIONAL

OCTOBER SKY OVER PITTSBURGH

OCTOBER's "31 golden days" are complemented by good sky-watching nights, for records indicate there are more hours suitable for night observing in October in Pittsburgh than in any other month.

Jupiter and Saturn, low in the south, remain as star performers of the evening skies. They appear to be separated by the same distance as the pointers of the Big Dipper. Jupiter, brighter and to the left of Saturn, began drawing farther to the left at the end of September and these giant planets will not be so close again for 20 years. As you watch these bright objects drawing apart during October, you might be interested to realize that it would take about 800 worlds the size of our earth to make a Saturn and about 1,300 to make a Jupiter. Jupiter's di-

[Turn to page 273]

SEVEN ONE-MAN SHOWS IN THE 1961 PITTSBURGH INTERNATIONAL

GORDON BAILEY WASHBURN

IN place of the RETROSPECTIVE OF PREVIOUS INTERNATIONALS that was a feature in the 1958 PITTSBURGH INTERNATIONAL, the 1961 exhibition—which opens to the members of Carnegie Institute Society on October 26—will be accompanied by seven one-man shows. These have been organized, thanks to a special grant from the Howard Heinz Endowment, to honor two sculptors and five painters. Three of these are American, the sculptor David Smith and the painters Grace Hartigan and Richard Diebenkorn; two are English, the sculptor Reg Butler and the painter Alan Davie; one is Belgian and one Danish, the painters Alechinsky and Carl-Henning Pedersen respectively.

It is hoped that this innovation may be repeated on subsequent occasions, as these little side shows make it possible for visitors to study a dozen works by several notable contemporary artists as well as to sample the singular representations in the main exhibition. The PITTSBURGH INTERNATIONAL is established by tradition as a review of the trends and tendencies in contemporary art as they are manifested in

Mr. Washburn has been director of the Department of Fine Arts at Carnegie Institute since 1951, and since then has organized four INTERNATIONAL EXHIBITIONS. It is he who invites the artists and selects each painting and sculpture to be shown.

Previously he was director of the Museum of Art at the Rhode Island School of Design and of the Albright Art Gallery in Buffalo. He is a graduate of Williams College and the Fogg Art Museum at Harvard, was recipient of a Guggenheim Fellowship and holds the *Légion d'Honneur*.

works of the highest quality. The one-man shows, by inviting us into greater depth, can help to balance the character of the visual banquet prepared in the larger galleries—a banquet not unlike an imperial Chinese dinner with hundreds of courses.

DAVID SMITH

The American sculptor, David Smith, is widely regarded as one of the most powerful and original talents in our country. Sam Hunter, in his foreword to the catalogue of Smith's one-man show at The Museum of Modern Art in New York, wrote that David Smith was "one of the primary innovators in contemporary American sculpture . . . second only to Calder, in point of time, as a pioneer in free-standing, open, metal forms." Apparently David Smith first found his direction as a sculptor in 1935 when he came across illustrations of Picasso's iron constructions and the forged work of the great Spaniard, Julio Gonzalez. "My student period," Smith has noted, "was involved in painting. The painting developed into raised levels from the canvas. Gradually the canvas was the base and the painting was a sculpture."

In the early twenties, Smith had worked as a riveter on the frame assembly line in the Studebaker plant at South Bend, Indiana. "I was acquainted with metalworking before studying painting," he recalls. "The equipment I use, my supply of material, comes from factory study, and duplicates as nearly as possible the production equipment used in making a locomotive." This industrial experience was later extended by the full-time

defense job he took as a welder of M-7 tanks and locomotives in Schenectady.

Today David Smith produces his iron and steel constructions at Bolton Landing on Lake George, New York. As we may guess from these quotations, David Smith delights in the materials of our modern age. Moreover, by examining the sculpture work from his shop, we can follow him when he rejoices that "metal itself possesses little art history. What associations it possesses are those of this century: power, structure, movement, progress, suspension, destruction, brutality." Nevertheless, as the critic, Hilton Kramer, has pointed out in the David Smith number of *Arts* (February, 1960), the content of his art is not industrial. "His themes are very often landscape motifs, pastoral and lyrical, with a great warmth of feeling for natural forms. They are often figures in anecdotal and erotic situations, and at various times . . . there has been a strong current of social comment and political symbolism in his sculpture."

David Smith's power is related to his ability to represent his own essence as a man, indeed his own mythology, in images of great formalistic power in open constructions that often suggest heroic iron drawings in space. Actually, he is also a very powerful draftsman, and we regret that some of these beautiful drawings could not have been added. His rigorous sculpture, as he has himself declared, "is a statement of his own identity." It is not difficult to perceive that the inward spirit he discloses is poetic rather than scientific in character, or that it has no fear of exposing its own homespun fantasy and invention—which relates it closely to the finest element in our American tradition, our individualistic humor and rebelliousness.

There, in Bolton Landing, David Smith reminds us of Henry Thoreau on Walden Pond, but a Thoreau who now wields a ham-

mer and an acetylene torch instead of a pen, a kind of visionary village blacksmith of the twentieth century. The small exhibition that has been assembled for Pittsburgh will show his works in his latest development, their severe and monumental forms eschewing the folkish extravagances of earlier days and offering a far harder and tighter formalism than he used to preserve in his youth.

RICHARD DIEBENKORN

As well as being one of America's most admired painters, Richard Diebenkorn is a figure who symbolizes for those deploring "abstraction" their hope of a widespread return to figurative art. In his earlier work, Diebenkorn abstracted his figures and landscapes to a point where their identity was practically lost and the figurative elements could hardly be recognized. This was characteristic of his whole "Berkeley" series painted before 1956. Since then he has painted identifiable figures, rooms, and landscapes, much to the delight of all who are contentious about the subject of abstraction.

Diebenkorn also represents a leading figure in West Coast developments, a veritable school having grown up in San Francisco around his person. Visitors to California who take the time to observe the work of the Bay area are fascinated to discover that dozens of painters have already echoed him. This is not, of course, surprising since he has lately come to be appreciated as one of the most individual figures in American painting, an artist whose images and palette are so personal they attract imitators like moths to a flame.

Born in Portland, Oregon, in 1922, Richard Diebenkorn studied at the University of California, the California School of Fine Arts, and Stanford University. He has taught at several of these schools, as well as several other seats of learning in the West, and now

lives in Berkeley, California. A quiet young man, he talks and writes little about his work, but those who love his art will never feel any need of any explanations since what he intends is clearly revealed in his painting.

That all his work, whether clearly figurative or nonfigurative, has been abstracted from material in the external world, must be obvious to all. "What I paint," he himself declared, "often seems to pertain to landscape, but I try to avoid any rationalization of this either in my painting or in later thinking about it. I'm not a landscape painter or I would paint landscape directly." Relying greatly on his instincts instead of mere calculations, Diebenkorn sometimes includes in a picture, even in a strongly figurative one, elements that lift it out of a rational text into semifantasy. We may see this in *July* (1957), where the slats in the park bench have been incorporated into the red and white stripes of an American flag behind the vigorous old codger who is seated there.

Diebenkorn relies as much or more on his perfect sense of color as on his line to organize a canvas, the color itself being an unmistakable product of his sensitivity to the sunlit land in which he lives. Perhaps there is no mark of achievement more persuasive than this of color. All painters identify themselves by their choices of color, but an artist who has realized himself completely will appear to use colors that are available to no one else; that seem, in fact, to have been invented for his own use alone. This is true of Diebenkorn's palette, whose inward glowing intensities and intuitive juxtapositions project his unique spirit beyond all possible levels of analysis or rationalization. "I paint, therefore I am" occurs to the observer who, presented with a work by Diebenkorn, feels there is no impediment between himself and the actuality of the man.

WCOFA
CI

Three illustrated lectures Tuesdays

Carnegie Lecture Hall, 11:00 A.M.

on the

1961 PITTSBURGH INTERNATIONAL
EXHIBITION OF CONTEMPORARY PAINTING
AND SCULPTURE

by

GORDON BAILEY WASHBURN

Director of Fine Arts

TRENDS IN CONTEMPORARY ART—November 7

PRIZE WINNERS IN THE
PITTSBURGH INTERNATIONAL—November 14

IN SEARCH OF TOMORROW'S MASTERS—November 21

Series—\$5.00; Single—\$2.00. Students—half price

(Make checks payable to the
Women's Committee, Carnegie Institute
and mail to 4400 Forbes Avenue, Pittsburgh 13.
Tickets also available at the door.)

GRACE HARTIGAN

A leading figure in the New York school of Abstract Expressionism that developed during World War II, Grace Hartigan has long since been recognized as one of America's most brilliant artists. An Action Painter, she generally employs large canvases on which she seeks to distill her emotions until only their essence is declared to us. As with certain other colleagues in this movement, Grace Hartigan has painted a number of pictures with identifiable subject matter. Apparently she is as indifferent as Pollock and de Kooning have been as to whether she is consistently abstract. Her intention, she herself has pointed out, is to produce an art neither abstract nor realistic. "I have found my 'subject'; it concerns that which

is vulgar and vital in American life and the possibilities of its transcendence into the beautiful . . ."

Born in Newark, New Jersey, in 1922, Grace Hartigan grew up in that state and lived in California for two years (1941-42) before she moved to New York in 1945. Her first one-man show was at the Tibor de Nagy Gallery in 1951. In her work, the act of painting clearly involves a muscular effort of the whole body. The results, as with certain other Action Painters, offer us images of huge size and shocking boldness. Yet she does not expect the spectator to "walk into" her canvases through the creation of an inviting inward space. "I want a surface that resists, like a wall," she declares, "not opens like a gate." Nowhere negative, and almost belligerent in their positive thrust, the forms tend to come toward us rather than to recede into the pictures.

Because of her freedom of gesture, which gives the impression of loose or random movement, the observer may at first find it extremely difficult to discover the underlying integrity or order in her art. This superficial difficulty is overcome on better acquaintance with the pictures. "Then the rawness," as she calls it, "must be resolved into form and unity. Without the rage for order," she has asked, "how can there be art?"

Europeans who have only recently become acquainted with Grace Hartigan's work or that of the other American Abstract Expressionists are both troubled and delighted with it. Some are distressed because this American art is filled with evidence of "terrible tensions" and rebellion; others are charmed because so much of it has a "festive pictorial quality" and is rendered "with unexpected tenderness and lightness of touch." Observing its personal romanticism, as if, indeed, this school of American Action

Painters might represent a final flowering of humanism, they have widely hailed this work as a fresh and valuable contribution to Western culture. Writes a Spanish critic with sympathetic perception: "Each picture is a confession, an intimate chat with the Divinity, accepting or denying the external world but always faithful to the more profound identity of conscience." These words might justly be applied to the pictures of Grace Hartigan.

ALAN DAVIE

Alan Davie is a Celtic painter from Scotland who has settled near London. Like the German expressionists and the Cobra painters, he has been strongly influenced by medieval and primitive art, as well as by children's drawings, in the development of his pictorial imagery. Perhaps the greatest influence on his work, however, has come from his studies of Zen Buddhism, as we may surmise from the following statement:

Sometimes I think I paint simply to find enlightenment and revelation. I do not practice painting as an Art; and the Zen Buddhist likewise does not practice archery as an exercise of skill but as a means to enlightenment. The right Art is purposeless, aimless. The more obstinately one tries to learn how to paint for the sake of producing a work of Art, the less one will succeed.

For Davie, the making of art has become as natural as breathing. "Art," he says, "just happens, like falling in love." Although called an Action Painter in the American style, he protests that he is not a mere self-expressionist whose physical activity and emotions are directly revealed on the canvas through an exhibitionistic frenzy. He thinks there is a misunderstanding of Action Painting in general on this score. "We could define the function of art," he thinks, "as being to arouse the faculty of direct knowledge by intuition." "Intuition," he continues, "is man's

highest faculty or perception—a kind of spiritual illumination which manifests only when the thought and sense perceptions of personal life have been overcome.”

As may be imagined, a considerable amount of Davie's work fails to satisfy him. He has not hit the target, and the paint on the canvas must be scraped off or the work discarded. “Many times the end seems just within reach, only to fly to pieces before me as I reach for it,” he declares. Clearly reason is not utilized, and the intellect is useful only “in as far as it can lead us to the point whence it may be superseded.”

Writes the perceptive critic, Alan Bownes: “These images seem to arise directly from a conflict between chaos and order . . . and one could say that the tremendous vitality of these paintings results from the fact that they are not pictures of anything but experience itself, caught in terms of paint.”

CARL-HENNING PEDERSEN

The works of Carl-Henning Pedersen have not been shown in America before except in single examples, as in our PITTSBURGH INTERNATIONALS. This is because Pedersen is reluctant to be drawn into our commercial world where he would be forced to concern himself with those false values and absurd social conventions that all but engulf the rest of us. An escapist? Yes, from our materialism which even we, who submit to it, fear and loathe, knowing that our contaminated outlook separates us from instinctual and intuitive life, from truth and beauty.

When Pedersen was recently pressed to sell a large group of his canvases to an American collector, he agreed only reluctantly. The check was handed to him, and the collector departed rejoicing. A year or more later, when the American again appeared, Pedersen handed him a slip of paper. “What,” cried the astonished collector,

“haven't you cashed this yet?” “No,” replied Pedersen, “I want to return it. If I need money I will ask for it.” “But I may be dead by then,” countered the American. “Never mind,” Pedersen is reported to have said: “Taking this money will change our way of life, and my wife and I do not wish to change it.”

Carl-Henning Pedersen is the very image of a Viking chieftain, with his big spare frame and crown of tangled blond hair, his clear eyes, and profile like an ancient ax-head. Thanks to his artist wife, Else Alfelt, he took up painting in the nineteen-thirties and first exhibited in 1936. Later he was a leading figure in the Cobra group, which included the painters Alechinsky, Jom, Appel, and Corneille, as well as several sculptors and poets. Many of these Cobra artists have since become famous, entering the world arena of art as major figures, their work now widely scattered through museums and private collections. Not so Pedersen, who, hermit-like, has kept out of the limelight and treasured his personal quietness.

Like other Cobra painters, Pedersen's work belongs to the Gothic north, its boundless emotionalism reflecting the character of northern men who have been little touched by classical ideals of rational form and measure. Their idiom is a loose expressionism; their motifs are weird creatures and other figures of fantasy from their private mythologies. They are naturalists of the phantasmagoric who for the most part have remained close to an animistic world with all its mysteries, its marvels, and its terrors: “The silver bowl from old Kafiristan. The brilliant gems. The beauty of the light of colors. The fairy tale. The vision, the motive power of a human being. The happiness of days as a string of pearls. The splendour of pearls.”—so dreams Pedersen of the natural and supernatural experience of life.

PIERRE ALECHINSKY

Another remarkable painter who was once associated with the Cobra group, Pierre Alechinsky likewise offers us a phantom imagery of great power and beauty. Fourteen years Pedersen's junior, he paints in a less regional manner, perhaps because he grew up in Brussels, which is itself a center in the international world of art. Moreover, since 1951 he has lived in Paris, where he has been involved in artists' activities relating to publishing and exhibitions, and has traveled as far east as Tokyo, where he made a film on Japanese calligraphy.

In the exhibition of the FIFTH INTERNATIONAL HALLMARK AWARD, Alechinsky won first prize and wrote the following for its catalogue:

Where does my art begin? Shall I start by making small lines, small crosses, small dots, or by a big sweeping stroke, by a big spot, or by an idea? Shall I begin by caressing the canvas which in my dreams already carries the completed work? No, I begin only with myself. My hands begin their movement. Nobody is there. My geography is uncharted. My head follows my eyes. No complicity—no encouragement. An impression takes form; I alone am responsible.

As we may comprehend from the above, Alechinsky discovers his images in the process of painting them, disclosing his own identity at the same time. Sometimes these images, called up from the depth of his psyche, appear in human form, like a crowd of beings crushed in an inferno of blue ice. It is a Dantesque image of lost souls that then appears to confront us, reminding us, too, of James Ensor's tangle of human creatures, and those of Bosch and Breughel before him. They seem to relate, therefore, to a Belgian tradition of fantasy that is already a very old one, since it also extends back into medieval images of hell and of paradise.

The complexity of his sinuous forms, which all but choke one another in their density, is such that we are forced to concentrate with great patience on their relationships, reading the elements in his pictures additively as we do with a Bosch or a Breughel. It is as though they had been extruded from a very narrow opening, that is to say, from a tube of vision rather than from the fully open doors of revelation.

His striking black and white pictures clearly derive from his interest in Japanese painting and calligraphy. There is nothing intrinsically Japanese about their imagery, however, which is Northern European in spirit, as is the rest of his work.

REG BUTLER

In contrast to the other artists in our seven one-man shows, Reg Butler, the British sculptor, is a classical artist, preserving strong bonds with traditional styles of imagery. This does not mean he is regressive in tendency, but rather that he has not insisted on discarding either the figure or the mass. In recent years, much of his attention has been focused on solidly modeled and rather naturalistic female figures. Before that, however, he often constructed open forms with welded wire and rods, and had made a number of cubistic or boxlike sculptures. He does not believe in a single direction for his work and has now returned to these "boxes," as he calls them, imprisoning within them several half-visible figures that further complicate their womblike mystery.

Reg Butler is a formalist, a man of definite classical turn of mind. No artist of our acquaintance possesses a clearer intellect or greater expertness in defining his position in a historic context. Naturally, this alert, rational mind reveals itself in his work, although we would be making a mistake to regard his sculpture as preponderantly intellectual. On

the contrary, it is immensely rich in emotional content and often seems in danger of bursting its own surfaces through its inherent sensuality. His intelligence serves rather to balance the elements of feeling and sensuality, assuring an equilibrium that would not otherwise be maintained. As he says himself: "Art which packs a punch is always near the hub: it is a fusion of a multitude of strands."

Butler has written that "the history of the last hundred years suggests that art is increasingly becoming understood as some kind of involuntary, compulsive consequence of the state of being human." We have already noted this tendency in our examination of the other six artists. "Sculpture," he continues in a letter to his New York dealer, Pierre Matisse, "while seen as an illusion as well as an object,—a falsification of nature ultimately to become a part of nature in its own right—is also comprehended as something quite undetachable from its maker; a part of his history. For we can see now as never before, that art is the mark of man with its beginnings and ends delineated and circumscribed by human nature alone."

Unfortunately no book has yet been written about Reg Butler's work, and we cannot do justice to its richness in so small an exhibition. Every phase of his production is represented in American collections, Butler's peculiar "mark" having been more widely understood and admired in the United States than in Great Britain. Admirers of his work find it significant that Butler originally trained as an architect and that he worked as a blacksmith during World War II, only turning to sculpture in 1944.

Nine years later Butler attracted the attention of the world by winning the international competition for a monument to *The Unknown Political Prisoner*, most of the

drawings for which are owned by Carnegie Institute. It is to be regretted that these could not have been shown next to his sculpture on this occasion, not to mention other examples of his fabulous draftsmanship that would have illuminated yet more deeply the power and depth of his art. Those who wish to see the Butler drawings in the Institute collection may visit the balcony of Sculpture Court, which has been restored to use as a permanent exhibition gallery for prints and drawings.

PALEOZOIC HALL

THE construction of a new, permanent exhibition, Paleozoic Hall, has been made possible by a generous gift from the Richard King Mellon Foundation.

Paleozoic Hall will occupy the 6,000 square feet of exhibit space on the first floor of Carnegie Museum between the Pennsylvania Coal Age and the Pennsylvania Cave groups and Dinosaur Hall. Construction of exhibit cases cannot begin until late in 1961, but detailed planning is already under way.

In time Paleozoic Hall will cover the tremendous span of more than 350,000,000 years between the Pre-Cambrian of more than 550,000,000 years ago, when life began, to the time of the great dinosaurs, the Mesozoic, of only 200,000,000 years ago.

Twelve dioramas re-creating life during significant periods in the development of plants and animals during those 350,000,000 years will be supplemented by fossils from the Museum's extensive collections and by graphic displays of pertinent geological features.

The display will be a beautiful three-dimensional textbook arranged in a self-explanatory teaching sequence, as well as a treasure house of fine and important individual specimens.

—J. L. S.



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A GAP IS SHOWING!

RICHARD BEAMAN

LEONARDO DA VINCI's left hand used to know what his right hand was doing. That was five hundred years ago. Today Picasso and Einstein, mutually inscrutable heirs apparent, reign from opposite sides of a gap in cultural affairs.

This gap, a hiatus between specialists of all sorts, "in itself is not undesirable," affirms a London *Times* editor. "Without a gap the electric spark would not pass, and our arc lamps would not give light or our motorcars run. . . . There is more to be said for gaps than is usually allowed, but their value in life lies in being at the right place and of the right dimensions. . . . This is the root of the matter when we come to consider The Gap that has come to enjoy the dignity of capital letters, namely the gap that has opened up in the past one hundred years between men of science and students of humanities. If it were smaller the two disciplines would act as a mutual stimulus. The physicists would sharpen their wits on the historians, the men of letters on the chemists, and each would gain something from the others. The trouble about The Gap at the present time is that it has widened to the extent of total mutual incomprehension. No spark can cross."

C. P. Snow, British scientist and novelist, in his recent book, *The Two Cultures and The Scientific Revolution*, laments that thirty years ago the two groups used to manage "a sort of frozen smile across the gulf. Now the politeness has gone, and they just make faces."

For lack of any spark crossing the Gap, the general laity now seems to be taking a relaxed attitude towards both the "crazy" artist and the baggy-trousered pure scientist, regarding them as equally remote, probably

harmless and perhaps even useful. "Wild" painting seems eventually to freshen up advertising graphics, and everyone knows by now that $E = MC^2$ had something or other to do with the development of the atom bomb: "useful" indeed.

After all, was there not always such a Gap? There are many people who feel we may as well defer to the inevitable. Surely there were ever those pioneers "way out" as the slang has it now, way out beyond the home folks. To the citizen of Florence the work of da Vinci must have looked way out, too, with its newfangled deep perspectives, compared to the flat painting of the Middle Ages. As for all his inventions, his schemes of flying, for machine guns, sewers, even for city planning, surely da Vinci in his own day was as "balmy" as his modern heirs. We may as well accept the distances between really creative thinkers and the rest of us with forbearance, even with gratitude.

Those people who are most concerned with the Gap do not accept any such easy reasoning. They suspect that Leonardo da Vinci was not at all "balmy" either to his neighbors or to those who commissioned his work. While some of his ideas may have looked pretty far out, most were practical enough to work in his own time. His painting excited admiration rather than "But what is it?" despite great developments in representing forms in deep space so unlike Medieval painting before him.

The point here is that the "before him" refers to centuries and not to decades. No man lived long enough to wince at the changes from Medieval to Renaissance painting. That gradual transition stands in sharpest contrast to the swift succession of

standpoints in the twentieth century. Succession is not even the right description, for the various schools overlap in their haste to be born.

Change, to be sure, has always been with us. The new factor besetting us today is the acceleration. The arts and sciences, bewildering us with new developments, take the spotlight, diverting attention away from broad shifts in our way of life. A change from feudalism to capitalism went on for centuries, still continuing in some parts of the world; and so also the mutation from city states to nationalism. Yet many adult lives now span the revolutions from *laissez faire*, free enterprise capitalism, to something more like monopoly capitalism, and on towards the welfare state here and abroad.

The rapid acceleration of change taking place in every facet of our lives scarcely needs to be argued so much as how to meet it with a sufficiently informed and, above all, flexible imagination. To leave every new question "to those best qualified to think," to specialists, might be sound advice if there were any adequate educated public opinion with the perspective to choose these experts. But it is this perspective that the Gap defeats.

In his jingle about the two-brained dinosaur, Bert Taylor may be most prophetic:

Behold the mighty dinosaur . . .
If something slipped his forward mind
'Twas rescued by the one behind.
And if in error he was caught,
He had a saving afterthought.
As he thought twice before he spoke
He had no judgment to revoke.
Thus he could think without congestion
Upon both sides of any question.
Oh, gaze upon this model beast
Defunct ten million years at least.

Lest we too become defunct, for all the lofty I.Q.'s of our many brains, there have been public discussions as well as much written

about the Gap. The American Federation of Arts oriented its 1959 annual convention around this subject. Later that year Carnegie Tech sponsored a three-day symposium of similar interest with speakers as diverse as I. A. Richards and Harlow Shapley.

Education is often invoked as a solvent for dissolving the coagulation, the hardening of mental arteries just when we most need an abundant flow. As a vague hope it offers little promise. How can education possibly be the answer for closing the Gap when those most conspicuously at the extremes are among the best educated, while the ignorant are most nearly of one mind?

Against the towering backdrop of Russian achievements, great pressure has built up in P.T.A. meetings, among college leaders, and in government circles to intensify education, especially to increase training in mathematics, and in the sciences on all levels. A recurring counterproposal insists on a broader liberal arts training to combat overspecialization.

Both proposals run into a variety of obstacles. The schools claim a shortage of science teachers while wondering what good it will do to jam mathematics down untalented throats. We may as well insist that every child try to become a composer or painter.

At the college level, in professional art and engineering schools there has been a twenty-year growth in the humanities program. This in turn is under pressure from a growing body of knowledge that demands more specialization just as a means of "keeping up."

Adding courses this way or that, so far from helping to narrow the Gap, may only widen it. The professors, themselves specialists at the extremes of the Gap, tend to teach the arts and sciences as unrelated disciplines, so that by commencement time the

educated heads have at least two compartments of knowledge without much common passageway.

Maybe, just maybe this Gap is not as between planets, but more like a chasm. Maybe the arts and sciences, so long assumed to be poles apart, have a fundamentally analogous role upon which we can rest some hope for narrowing the Gap down to that point where a spark may jump. To that end a reorientation will be more useful than simply more education.

"Analogous" was the word, not "same." Trucks and linseed oil, as different as a rigid frame can be from a liquid, are equally good vehicles for what each is intended to carry. If we define them in terms of substance, they have scarcely anything in common. Off-hand, painting and physics give little reason for us to suppose any similarity even if we define them according to what they do. Why even suppose that there is any analogy? Well, there are many reasons. There seem

The author is associate professor of painting, design, and sculpture at Carnegie Institute of Technology, where he has been on the faculty the past six years. He was represented in the BICENTENNIAL INTERNATIONAL, has had one-man shows at Carnegie Institute, the Arts and Crafts Center, also in New York City and the Los Angeles area. He is currently president of the Associated Artists of Pittsburgh.

Mr. Beaman is a graduate of Harvard University with B.D. degree from Union Theological Seminary. He also studied at the Eliot O'Hara School of Watercolor Painting, Columbia University Teachers College, the University of California, and Massachusetts Institute of Technology. From 1939 through 1955, with the exception of Navy service, he was head of the art department of University of Redlands, teaching also at Long Beach State College and California Institute of Technology.

North Atlantic Quarterly and *Education Magazine* have published his articles. "A Gap Is Showing!" is part of one that appeared in *Carnegie Alumnus*.

to be cultural patterns that prevail over arts and sciences alike in some measure. Two striking examples come to mind:

First of all, at the time of the Renaissance, while painters were excited about nature, about light and how it renders three-dimensional form, about anatomy and exploring all sorts of natural forms, they perfected what is called linear or mechanical perspective. Briefly, this is a way of representing parallel lines so they recede to a vanishing point in the distance just as railroad tracks seem to. This recession describes not the actual fact of parallels, but how they appear. Da Vinci's *Last Supper* is a good example in point, for in this famous composition all the lines of the building are made to recede to a point directly behind Christ's head. In this way the drawing on the flat wall plane suggests a full three-dimensional room volume.

The striking characteristic of this sort of perspective is that it renders three-dimensional fullness as seen from one fixed position. Neither the artist nor the subject can move. The points into which all parallel lines are shown vanishing are on a level with the painter's eye. If he changes his eye level, then the drawing is false to his new position and has to be done over again. This is a most systematic way to represent space, one that constrains everything in the composition to become smaller and smaller in the distance.

About this same time scientists like Copernicus were busy developing notions of the universe that shared this fixed point of reference. Their universe had a center, earth or sun, but in either case a fixed point about which all else revolved. For Copernicus the sun was this center. Did the Renaissance painters and scientists read each other, so to speak, or were both soaring on the same cultural wings?

A second example of the revolution in

space concepts took place in the early part of this century. For both arts and sciences, space and time lost all the objective character of a fixed point of reference. The old question of whether the sun or earth is at the center of the universe dissolved into new attitudes in which any notion of center is meaningless. The absolute up, down, and sideways of Newton was given up by Einstein, who showed that the motion of stars and planets can only be described relative to an observer's varying position. Time and space lost their mantles of objective reality and became arrangements of experience oriented to the way our minds work.

So brief a reference to modern concepts of space and time is meant only to highlight the analogy with similar changes that took place in several of the arts at this time. Here, too, the fixed-point systems faded out into multiple perspective. Cubism is the most

familiar example. Several of Cézanne's landscapes and still-life paintings began to include items drawn as seen from different positions, all in the same painting. What he did subtly, the Cubists of about 1910 did right out loud, including in one painting, for example, front and side views of the model's head at the same time. If Cubists Braque and Picasso were confusing to laymen at this time, so also was Einstein for a similar disorientation, no matter how well it was "explained" in popular terms.

Did Picasso read Einstein, or did the latter study paintings of that decade? It is more likely that these minds were caught up in a broader movement, a movement that goes well back into the nineteenth century, and one that is new only in emphasis. One feels compelled to attribute these changes to the cultural climate of the times.

Somewhere at the bottom of the chasm, as

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we prefer to consider the Gap, lie these prevailing influences affecting both sides at once. Cezanne supposed that he was just painting a particular still life, which indeed he did, to his honor. Similarly a physicist devoting himself to a problem of the way light behaves may carry his theoretical solution far beyond into the nature of energy.

Not long ago a mathematician was asked how she would go about choosing from ten new mathematical systems, all equally true in the sense of being logically self-consistent. Her offhand reply was that she would take that system which seemed to promise the most in terms of opening doors to new mathematical experience. This is a criterion to which any artist would subscribe instinctively.

In recent years similarities in all sorts of creative thinking have been noted. The composer takes from the cacophony of all kinds of sound a selected few, which he disposes in an order measured off into a total form, a sonata, symphony, or concerto. The physicist, for entirely different purposes, selects out of some natural event certain data he uses in formulating a theory to be checked by experiments. From relative disorder both gather up the pieces they need for assembling their creation.

Genius has this capacity to make intuitive leaps from parts to wholeness. Sometimes, as Mozart and Poincaré have testified, this happens unexpectedly—in a flash. Again it may mature slowly as one builds and destroys until that wholeness is found in which the pieces assume their places with an air of inevitability. Artists of all kinds do share this intuitive capacity with the creative scientists across the Gap. The analogy between arts and sciences is a function of the creative mind as such, its bold willingness to jump out of old ruts, its imaginative reach, and its courage to walk alone.

OCTOBER SKY

(Continued from page 260)

ameter of 88,000 miles is not much greater than Saturn's 75,000, but Jupiter is about 450,000,000 miles away, whereas Saturn is 925,000,000. So Jupiter appears much the brighter.

The thin new moon should be seen for the first time early in the evening of October 11, and first quarter comes the night of the 16th. On that night the moon will be just to the right and slightly above Jupiter and Saturn. The full moon, of October 23, is the hunter's moon, and for several nights bright moonlight floods the evening sky.

The planet Venus, unsurpassed in brightness except by the sun and moon, will continue as the morning star, rising about two hours before the sun. The thin crescent of the old moon will stand very close to this most beautiful of the planets the morning of October 7, making one of the prettiest sights to be seen in the sky.

The Orionid shower of meteors occurs for a few nights around October 20. The meteors are best seen in the morning hours but will have to compete with a bright moon this year. They seem to come from the conspicuous winter constellation Orion, which is well up in the south by dawn.

The three brightest stars in the northern half of the sky may be seen just after dark in October if you have a full sweep of the northern horizon. Arcturus is setting in the northwest, Capella is rising in the northeast, and Vega is a bit west of the overhead point. The handle of the Big Dipper, low in the northwest, points to Arcturus.

During October the duration of daylight decreases more than an hour and a quarter, the sun drops well below the equator and the stage is set for winter.

—NICHOLAS E. WAGMAN

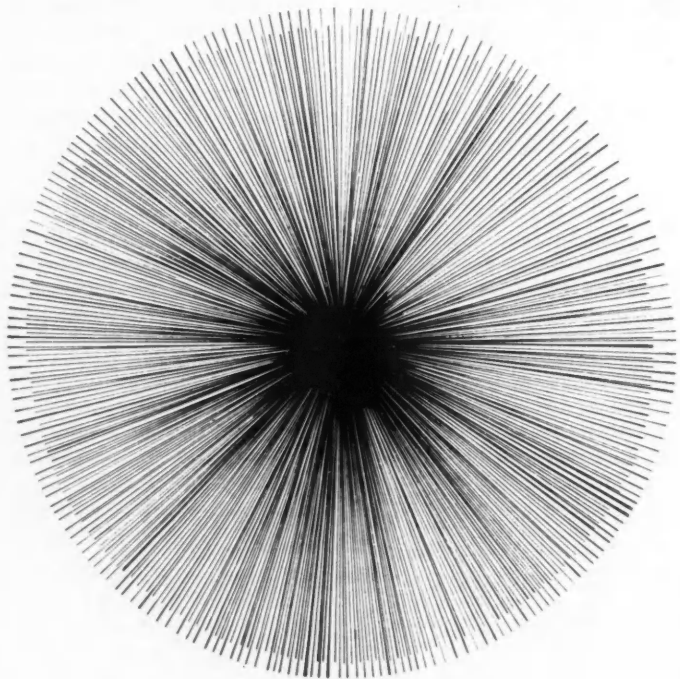
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A delightful writer and traveler revisits enchanting lands and describes a gentle people with ancient ways at the mercy of a new world making.

—H. P. F.

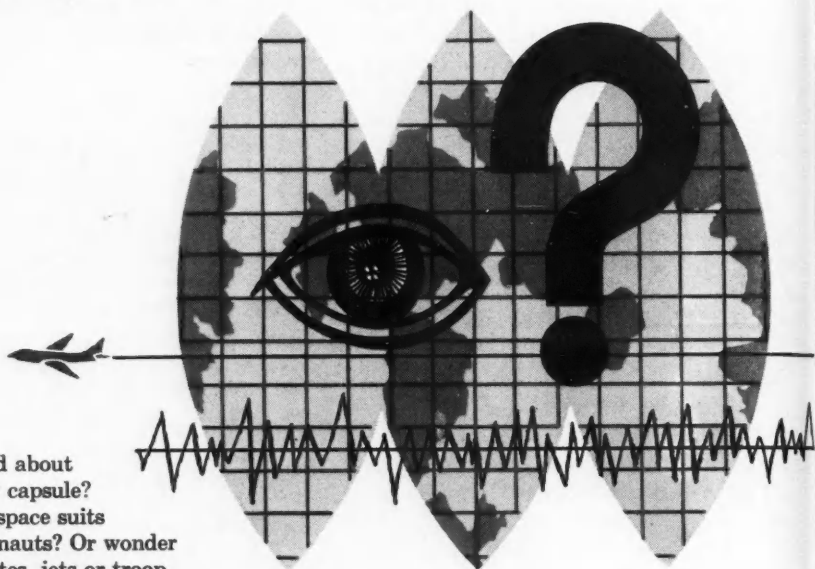
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PONY AND WIRE WELD A COUNTRY

ELIZABETH MUSTARD

THE *Sacramento Union* was scarcely off the press when two hundred adventurous young men rushed to apply for the job. It was the same in St. Jo and other towns in the West where Russell, Majors & Waddell, well-known express company, had placed the advertisement.

WANTED: Young skinny wiry fellows not over 18. Must be expert riders willing to risk death daily. Orphans preferred. Wages, \$25.00 per week.

These were the rough and ready fellows who, for the next eighteen months, were to serve so dramatically, carrying the mail across the country and filling the missing link in a transcontinental telegraph system.

The railroads and telegraph had reached St. Joseph, Missouri, but the shortest route from there to California was over snow-capped mountains, across a desert, and through hostile Indian territory. So keen was the competition for the mail route that everything had been tried—wagons, mules, and even the imported Bactrian camel for use on the desert. But W. R. Russell, the most imaginative partner of the firm, was determined to prove a direct service was possible—and he did.

An aura of romance completely surrounds the history of the Pony Express, and facts and figures blur in the many tellings. According to one account, however, Mr. Russell was in Washington trying to get the

Mrs. Mustard, of Gibsonia, is chairman of the creative writing group at the College Club. A Wellesley alumna, before her marriage she worked for the Oxford University Press, on research for the *Encyclopaedia Britannica*, and for the Council on Foreign Relations, in New York City. *Parents' Magazine* published one of her articles.



PONY EXPRESS RIDER ON OFFICIAL EMBLEM

much-coveted \$900,000 government mail contract when, to silence all competition, he made a wager of \$200,000. He declared he could establish a mail line that would cover the distance of 1,950 miles between Sacramento and St. Jo in ten days, using pony and rider.

It seems likely that a previous agreement with Frederick A. Bee, founder of the first telegraph line to be strung eastward from California, had somewhat strengthened his position, but Mr. Bee and Mr. Russell failed to convince the Senate Committee on Post Offices that a pony express mail service between telegraph offices was feasible.

Mr. Russell did, however, convince his partners, and in less than three months the Central Overland California and Pike's Peak Express Company—later to be known as the Pony Express—was put in operation. The first advertisement was in the San Francisco *Evening Bulletin* of March 17, 1860,

announcing the "Letter Express" from San Francisco to New York in nine days, leaving every Tuesday.

The Express started with three hundred of the best mustang horses, eighty riders, and forty-five men to operate the stations along the way. Each rider had to cover between fifty and seventy-five miles, changing mounts three times at stations spaced about every twenty miles. Two minutes were allowed at each station for putting the saddle and *mochila* on a fresh horse.

In the beginning, the price of a letter was \$5.00 per half ounce plus ten cents government postage. (Later, the price was reduced.) True to the agreement with Mr. Bee, telegrams were carried for half this price, and the Pony Express advertising usually gave equal emphasis to both telegrams and regular mail.

With appropriate fanfare including speeches and a booming cannon, the first

rider left St. Jo on April 3, 1860. He carried a cantina of mail with only forty-nine letters, five telegrams, and some special editions of newspapers printed on tissue paper.

To us who have access to one of four hundred thousand corner mail boxes, a little mail would hardly justify a dangerous trip. The importance of mail service is understandable, however, when one realizes that the gold rush in '49 brought over seventy-five thousand people into California. For the next decade they continued to come. San Francisco, fast becoming a thriving commercial center, was begging for better service, and the uprooted people longed for more regular news.

California's first communication with the East was by ship sailing around Cape Horn each month. On arrival in Los Angeles and San Francisco, the captains dumped the mail on the counter of some designated store. The expectation was that the rightful

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owners would claim their mail within the next few months. Gradually a few post offices were established, and time was shortened somewhat when the railroad across the Isthmus of Panama was completed in 1855, but delivery time was still anywhere from three to six weeks.

The Butterfield Company, which ran the stagecoach throughout the West, had obtained the government mail contract in 1858. Butterfield carried the mail by a circuitous southern route that covered twenty-seven hundred miles and took twenty-four days. The charge of upwards to \$20.00 for a letter was no inducement for much communication.

Little wonder that the Pony Express created such a stir! Brave riders won the gratitude of the whole country, and Buffalo Bill Cody, Pony Bob Haslam, and Wild Bill Hickok are unforgotten heroes even today.

"The Pony" served its purpose well. It was "by the Pony" that news of Lincoln's election on November 7, 1860, was sent across the country, and the most important message the Pony ever delivered was word that California would remain loyal to the Union. To the "skinny young men—willing to risk death" we owe a debt. They conquered the mountains and the desert and pioneered the route of the transcontinental telegraph. And the telegraph, perhaps more than any other single achievement, held our country together at its most crucial moment.

To another man, Samuel F. B. Morse, who figured so importantly in welding the country by wire, we are also indebted. He was the one who struggled unceasingly to get the government to recognize the telegraph's usefulness and to appropriate money for construction of an experimental line between Washington and Baltimore. His idea met with such derision that one waggish senator went so far as to say, with prophetic

JUNIOR LEAGUE BALL

October 21, Carnegie Music Hall Foyer
Benefit, League's Community Trust Fund

irony, it was as silly as spending money to send messages to the moon!

Congress finally appropriated \$30,000 in 1843, and "What God hath wrought," tapped out in Morse code on May 24, 1844, had barely died on the wires when new lines were being extended. By 1851 there were over fifty telegraph companies. But sending a message through several companies was not only slow but costly. Dissatisfaction with this inefficiency led one of the larger New York telegraph companies to absorb thirteen smaller ones and form the Western Union Telegraph Company. This was in 1856; within four years the country was at war.

Although California had been admitted to the Union as a free state in 1850, only two years after gaining independence from Mexico, by 1860 over half the state's population favored the Confederacy. Indeed, many wanted to make the Far West into an independent nation. Washington was too far away both in fact and in spirit to have any solid reality.

As the War between the States became more imminent, the federal government not only needed the resources and support of California to win the war but realized the vital necessity of binding together the sprawling settlements of the West. Faster communication was imperative.

After the battle of Fort Sumter, Secretary of War Simon Cameron asked Thomas S. Scott, vice president of the Pennsylvania Railroad, to organize a telegraph and railroad service for government use. It was one Andrew Carnegie, then superintendent of the Pittsburgh division, who accompanied

Scott to Washington and directed the work of extending telegraph lines and tracks around Washington. Before the battle of Bull Run, Carnegie had wires run to Virginia to be in closer touch with General Irvin McDowell and organized a group of riders to deliver messages to the front.

In spite of all this new efficiency, President Lincoln had to leave his White House office at least three times a day to walk to the War Department, where the telegraph office was located. There he sat, sometimes for hours, waiting for the latest war news.

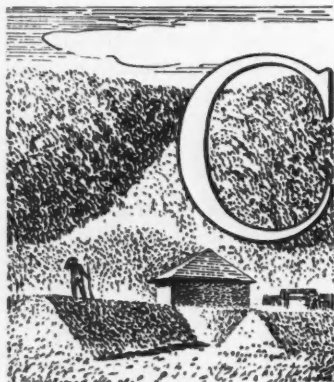
A promised subsidy from Congress of \$40,000 annually for ten years for carrying government messages over a transcontinental telegraph, and California's offer of \$6,000 per year to the first telegraph connecting that state with the East were sufficient incentive for extending the lines. Telegraph wires were run as far west as Fort Kearney, Nebraska, and east from San Fran-

cisco to Fort Churchill, Utah, shortening the Pony route by two hundred miles. Small connecting lines between important centers were rapidly constructed. Sometimes the wires were just fastened on trees, a glass insulator with a hole in it holding up the wire.

It was during the summer of 1861 that Western Union began the job of connecting the lines. The problems of finding poles on the flat, treeless plains, stringing wires over mountains, and making friends with the Indians seemed almost insurmountable. Lincoln did not think it could be done.

In less than four months, however, the connection was made at Salt Lake City on October 24, 1861, one hundred years ago this month. Brigham Young sent a telegram to President Lincoln, promising Utah's loyalty to the Union, in honor of the occasion. It was Stephen J. Field, chief justice of California, who was given the honor of

[Turn to page 285]



Coal...FROM A HILLSIDE ACROSS THE RIVER

In 1760, according to Capt. Thomas Hutchins, the first coal mine in Pennsylvania was opened in the side of "Coal Hill," now called Mt. Washington, across the Monongahela River from Fort Pitt. This coal was mined for the use of the resident garrison. They called the coal "The Great Seam," and well they might. It was the first production from what is now termed "The Pittsburgh Seam," and often referred to as the most valuable mineral deposit known.



CONSOLIDATION COAL COMPANY

BEDFORD REVISITED

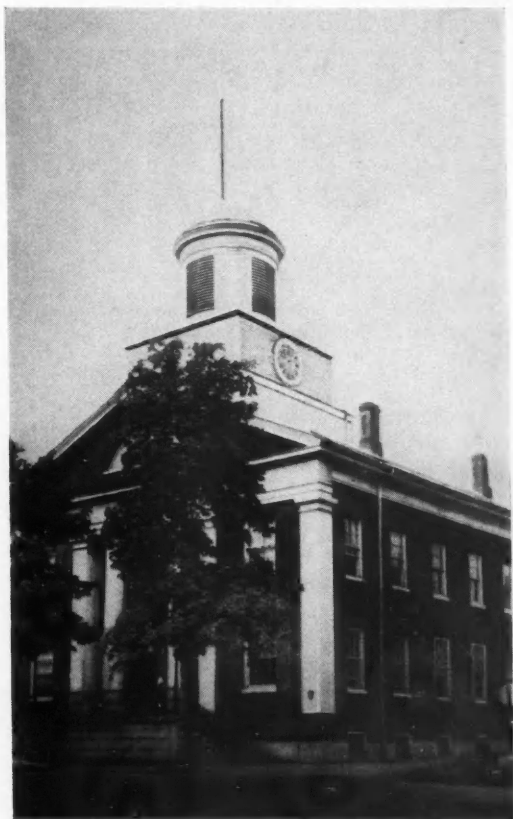
AUSTIN WRIGHT

ON a gentle slope descending to a stream that skirts Will's Mountain in the Alleghenies of Pennsylvania lies the pleasant town of Bedford.

Stand in any street and you will glimpse at either end a vista of wooded hills, startlingly near at hand. Mountains, rich green in the sun, blue at dusk, forbiddingly black at night, rim the town with an ever-changing wall that becomes a tapestry of color in autumn. Quiet streams meander through the encircling meadows and woodlands toward the Juniata, and fortunate anglers enjoy their placid sport a negligible distance from their homes.

Peace is only a mirage in this scrambling world, but in Bedford one seems to approach it.

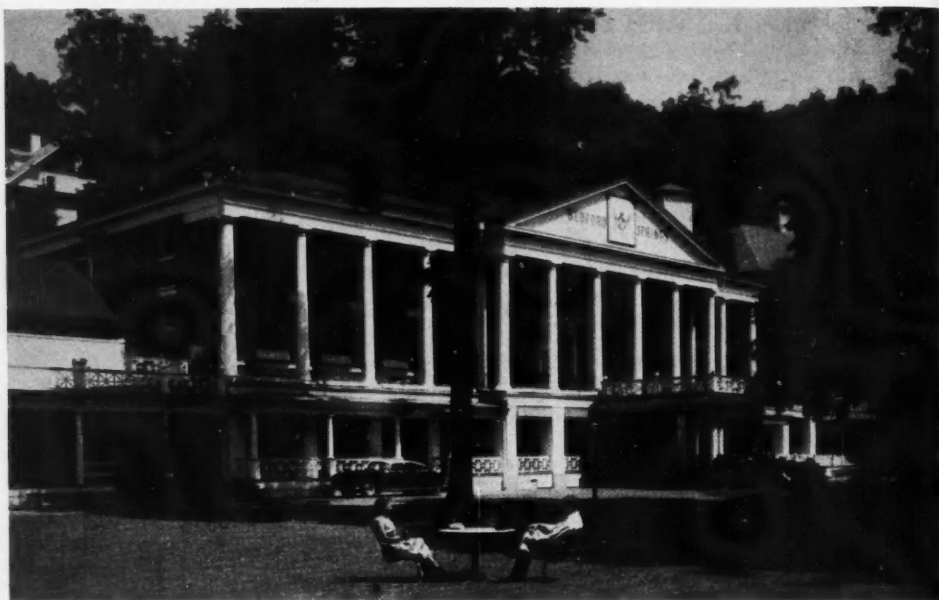
Though Indian traders erected cabins at the site some years earlier, the history of Bedford dawns with the British expedition of 1758 against Fort Duquesne. Trudging that summer through the mountains over a narrow, muddy trail that could hardly be called a road, the sweating soldiers of Colonel Henry Bouquet tarried long enough to throw up a stockade fort and then plodded on, through the nearby hunting grounds of the Shawnee, westward in painful stages toward the strategic forks of the Ohio. To Bedford their dying leader, General John Forbes, was carried in the wake of the straggling army; and here an angry young Virginian named Washington, red-hot at what he considered a wrong-headed decision to hack a road through Pennsylvania wilderness instead of follow-



The Tecraft Company

BEDFORD COUNTY COURTHOUSE

ing the already cut but disaster-haunted path of Braddock, argued as persistently with his superiors as he dared. Two centuries have passed, but high on the wooded summit of the Allegheny Mountain twenty miles to the west, incredibly preserved by its remoteness from the busy modern road, remains the outline of earthen breastworks



UNHEARD MELODIES LINGER AROUND THE CENTURY-OLD BEDFORD SPRINGS HOTEL

that were thrown up by Bouquet's men.

At Bedford slowly grew a hamlet huddled round the fort for protection against the raids of Pontiac's Indians. There in 1769 James Smith and his "Black Boys" defied Britain by capturing the fort one morning shortly after the gates were opened and the soldiers, with arms rashly stacked, were enjoying a "morning dram." There during the dark days of the Revolution settlers found shelter when savages again prowled the forests. Back to Bedford in 1794 came George Washington, now President, to meet the challenge of the whiskey rebels. The Espy house where the President stayed still remains, as does the Hartley farmhouse to the east at Mount Dallas, where he whiled away an autumn evening at backgammon.

In 1805 Charles McDowell established the *Bedford Gazette*, followed in 1813 by Thomas R. Gettys' *True American*, now the

Bedford Inquirer, whose dual record of continuous publication makes them today two of Pennsylvania's oldest newspapers. With the opening of the West arrived the bustling era of turnpike travel, when stagecoaches rattled over the mountains and droves of cattle thronged the dusty roads and every third house was a tavern.

Bedford Springs drew its fashionable visitors. A company of Bedford boys marched gallantly off to fight in Mexico, faltered under the onslaught of fever and dysentery, won glory in the assault on Chapultepec. A few young men hurried off to seek gold in California; feeling boiled between abolitionists and Southern sympathizers as the Quakers of Fishtown and Pleasantville quietly continued to conceal and transport slaves seeking escape by the Underground Railroad; a distant booming was heard one July afternoon from Gettysburg to the east;

some other young men left to fight Indians on western plains; the ranks of blue-clad veterans at Decoration Day ceremonies began to thin; and in village and on farm passed slowly that life of nineteenth-century rural America so familiar from our literature, the life of barn-raising and quilting bees and one-room schools and winter firesides and the town pump and Fourth of July orators and sled-rides—the life so pleasant and peaceful in retrospect but no doubt often harsh and dull in reality.

Then the twentieth century, two World Wars, neon signs, the Pennsylvania Turnpike, nuclear warfare, and the astronauts.

Like everything else, Bedford changes. A decayed but beautiful home gives way to a motel; the highway through town is slightly widened and a hundred trees vanish; traffic clogs the central area. But "though much is taken, much abides."

Juliana Street and Richard and Penn stretch tree-bordered much as they did a century ago. The Square (1766) sleeps sun-dappled through long summer afternoons, watched by the ancient courthouse (1828), the Presbyterian church (1830), the Russell house (1816), the brick-fronted offices of lawyers and judges. Just to the south is the stately Lyon house (1833), with its twin offices and surrounding brick and fieldstone walls. Stand before the Barclay house (1810) next door and let your sight wander past the Mann house (1842) on the corner and through the foliage and white grave-stones of the old Presbyterian cemetery and on to the distant wall of mountain topped by blue sky.

A block to the east is the little Episcopal

Professor Wright, head of the department of English at Carnegie Institute of Technology, is a native of Bedford, Pennsylvania. Though his principal intellectual interest is English literature, he is also a student of local history.

church, looking as if transported from Shropshire or Kent. To the southeast lies the Grove, built by Hugh Barclay before 1800, and to the north on Penn Street the Watson house (1810), with its quaint lawn settee. On Pitt Street, along the old Forbes Road, stand the National House (1810) and the Anderson house (1814), with a giant elm that remembers Henry Bouquet, and at the eastern end a stone tavern that has lain bowered in trees beside the sun-flecked stream since before the Revolution.

But the word "Bedford" brings to mind not just the town; it conjures up enchanting regions round about. At Bedford Springs there was a hotel of some sort a hundred and fifty years ago, and the present gracious central building was completed in 1842. This romantic spot, cherishing recollections of famous visitors and haunted by unheard melodies played yesteryear by vanished orchestras on a thousand gay occasions, inhabits the memories of all who have ever lived nearby.

Through the golf course wanders cheerful Shover's Run, past maple-shaded hotel lawns, past log house and stone mill rooted in the eighteenth century. Hidden thrushes at dusk pierce the silence along wooded fairways with the liquid melody of the loveliest of bird songs, one echoing another as the sound recedes into the forest. Linger by the thirteenth tee and gaze across tree-dotted turf and past woodland borders to the farthest magic reaches of the beautiful links. What matters one's score when one plays in Elysium?

A few miles east spread the rolling grain-fields and pastures and great barns of Friend's Cove, where cattle dot the wide valley and a network of roads invites to quiet evening drives.

Ten miles to the west the Schellsburg cemetery, graced by a log church that with

WHAT IS THE TIME?



National Gallery of Art
Index of American Design

From early in history, man reckoned the time of day by the position of the sun in the sky. Its rising signaled him to be up and about his daily tasks; its setting began his time of rest. Activity in between was keyed to the mysterious, fiery ball's journey through the heavens.


It was natural, therefore, that in designing the first device for measuring time, the ancient Babylonian and Egyptian should use the sun as the basis for its operation.

Sundials were first employed about four thousand years ago. They continued in general use until the nineteenth century when accurate clocks became inexpensive enough for everyone to own.

This bronze dial was designed by the most inventive of our American presidents, Thomas Jefferson. Its face is decorated with a blazing sun and is numbered in Roman numerals from 4 A.M. to 8 P.M., the average hours of daylight. When the instrument was in use in the garden of Monticello, the *gnomon* or triangle of flat metal pointed true North-South and was set at the same angle or degree as the latitude of the Virginia estate. Then when the sun hit the gnomon, it cast a shadow on the sundial face. The numeral or quarter-hour mark at the shadow's edge was the time of day.

Because the sun is not a point of light and its shadow is slightly diffused, the sundial, no matter how carefully constructed, cannot be accurate to the minute; but for centuries it served as man's best method for telling time.

Today time is measured to the split-second, even when it comes to cooking ingredients for the 57 Varieties. This is why each Heinz product is consistently good to eat.

HEINZ  ... Symbol of UNIFORM QUALITY in foods

its wineglass pulpit has stood for more than a century and a half, straddles Chestnut Ridge. Already in 1890 the spot seemed "ancient" to Judge William M. Hall as he strolled there, accompanied by much the same thoughts as once moved Thomas Gray in another lovely country churchyard—though at Stoke Poges one cannot gaze beyond treetops to the remote blue line of the Allegheny.

Southwest of Bedford, in "the little canoe-shaped valley of Milligan's Cove" (Judge Hall again), the White Sulphur Springs Hotel sits among pines that preceded the earliest settlers. The matchless spring still yields the cooling, crystal water that sparkles always in the memory. Years ago, when a certain small boy was introduced to this beverage and asked how he liked it, he mused, "It tas'es like egg at the end"—a descriptive phrase not easily to be bettered.

In a deep valley at the northern limit of the county broods the silent glen where the "lost brothers of the Allegheny" were found dead over a century ago by searchers guided by a strange dream, a spot as remote and lonely today as in 1856.

Bedford is a composite of moods and memories.

It is bright morning sunlight filtering through the foliage on the Square, the white cupola of the courthouse etched against blue sky, the harsh cries of nighthawks wheeling overhead after sundown, the lonely whistling of whippoorwills in summer darkness.

It is the moon viewed over Constitution Hill as one sits on the broad veranda at Bedford Springs, it is a wistful melody played by a band at the fairgrounds while acrobats perform as they did at the fairs of one's childhood, it is deer browsing in August twilight at the wooded edge of a meadow.

It is rain sweeping up from Cumberland Valley in gray sheets, splashing in quick tor-

rents down gutters and over brick sidewalks or pattering in the drowsy night on the roof.

It is the sweetly-sad chorus of katydids that heralds the approach of autumn; the muted colors of a wet afternoon; the long afterglow of a summer day.

It is rest, contentment, peace.

Life passes swiftly, slips through the fingers, ends all too soon. In Bedford, one may cherish it, savor it, while it yet endures.

PONY AND WIRE

[Continued from page 280]

sending the first transcontinental telegram to Abraham Lincoln, and he chose the opportunity to reaffirm California's support of the Union.

This, of course, was the end of the Pony Express.

The day before the wires were connected at Salt Lake City, the *San Francisco Bulletin* said sadly: "Great epochs approach with moccasined feet—great events glide in with muffled oars. One of these great events, a grand epoch for California, is just at hand—the opening of telegraphic communication from New York to San Francisco. It comes without half the fuss that the Bactrian camels made . . . One of the wonders of the age is just about being revealed a perfected fact and it scarcely makes as much sensation as a \$1,000 fire would do."

One hundred years ago a message was tapped out in Morse code at the rate of thirty words a minute. Today a message travels at the rate of three thousand words a minute by facsimile. As many as two thousand telegrams can be sent simultaneously with faster-than-speech speed over microwave radio beams.

A senator can no longer laugh at the idea of sending a message to the moon!

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